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| 09/887,188 | 06/22/2001 | Olivia Ruth Burgess | 05222.00141 | 7248 |
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| BANNER & WITCOFF, LTD. ATTORNEYS FOR CLIENT NO. 005222 10 S. WACKER DRIVE, 30TH FLOOR CHICAGO, IL 60606 | | | EXAMINER | |
| | | | STARKS, WILBERT L | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | |
|------------------------------|---|---------------------------------------|
| Office Action Summary | Application No. 09/887,188 | Applicant(s) BURGESS ET AL. |
| | Examiner Wilbert L. Starks, Jr. | Art Unit 2129 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(o).

Status

- 1) Responsive to communication(s) filed on 14 May 2007.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-90 is/are pending in the application.
 - 4a) Of the above claim(s) is/are withdrawn from consideration.
- 5) Claim(s) 2-9,11-18,20-27,29-35,37-44,46-53,55-62,64-71,73-80 and 82-89 is/are allowed.
- 6) Claim(s) 1,10,19,28,36,45,54,63,72,81 and 90 is/are rejected.
- 7) Claim(s) is/are objected to.
- 8) Claim(s) are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. .
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (H-17 O/SB/08)
Paper No(s)/Mail Date
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date
- 5) Notice of Informal Patent Application
- 6) Other:

DETAILED ACTION

Claims 1-90 have been examined.

The claims are deemed statutory because they are claimed to be practiced on a computer.

Compact Prosecution Statement

In the event that the Applicant wishes to amend, the Examiner suggests the Applicant consider using language from one of the allowed dependent claims.

Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 10, 19, 28, 36, 45, 54, 63, 72, 81, and 90 are rejected under 35 U.S.C. § 102(b) as being anticipated by Bloom et al., (U.S. Patent Number 5,597,312 A; dated 28 JAN 1997; class 434; subclass 362) discloses an intelligent tutoring method and system. Specifically:

Claim 1

Claim 1's " (a) receiving an indicia representative of a store goal, the indicia identifying training that is associated with the store goal , the store goal corresponding to a student being trained in an aspect of inventory administration for a store;" is anticipated by Bloom et al., col. 6, lines 40-67, where it recites:

In such a fashion, the method and system of the present invention are consistent with several features of the minimalist approach to training and learning. Specifically, the present invention employs task-based training, and allow trainees to start immediately on meaningful and realistic job tasks in any order. Moreover, the present invention keeps the amount of passive instruction to a minimum. Only prerequisite information that cannot be conveyed to the trainee during active contact rehearsal is conveyed through guide (92). In addition, information in guide (92) is presented in interactive, multimedia formats to increase the level of involvement by the trainee. Finally, the present invention contains explicit training on errors and error recovery to support the recognition and recovery from error, thereby making the learning materials more robust and complete, and training learners in error recovery skills.

Further, inventory is anticipated by Bloom et al., col. 1, lines 20-36, where it recites:

The CSR's job is a complicated one in which they are expected to handle all manner of customer calls regarding the provider's products and services. This means that they must simultaneously carry on a consultative conversation with the caller, manipulate service order and billing software to find out information about the caller, enter information regarding service registration, rapidly look-up information about **availability, compatibility and capabilities of the different products** and services from reference documentation, understand all of the features and incompatibilities of the offered services, and at times prepare mailings of information for the customer. These services and products, as well as the information about them, are frequently updated, producing an ongoing learning problem in order to "stay current". Because of this

complexity, it may take a year or more of **training** and on-the-job experience for CSRs to become fully proficient.

Claim 1's " (b) integrating retail information that provides assistance with achieving the store goal;" is anticipated by Bloom et al., col. 15, lines 30-60, where it recites:

Still referring to FIG. 7, the discourse grammar (144) then maps onto sets of situation-action rules (146). Situation-action rules (146) are the individual transitions in the discourse grammar (144) describing actions to be taken in response to given situations. Situations can be either customer statements, requests, or questions, or service order software output or configurations. Actions can be either responses by the CSR to customer statements or to application information, commands or data entered into the application by the CSR, or actions focused around information processing and decision making, as previously described.

The next level of hierarchy (140) is conversations (148). Conversations (148) are syntactically correct sequences through discourse grammar (144) made up of sequences of situation-action rules (146). Each abstract situation and action in a conversation sequence is instantiated with specific information in the form of application commands or information, or text with accompanying audio. Conversations (148) are grouped together to reflect different types of scenarios that could occur between a caller and a CSR. Branches within conversations (148) are based on customer information. Situation-action rules (146) that are conceptually related map onto discourse grammar (144) nodes. These nodes are reusable portions of conversations that can appear in several different conversation scenarios. Ultimately, a specification of each of these layers defines a course, such as VMS. A course has a title, list of topics, a list of grammars, a list of activities (situations or actions), a list of conversations (subsuming text, audio, and application communication) and a list of application specifications.

It is further anticipated by Bloom et al., col. 16, lines 15-30, where it recites:

Referring now to FIG. 8, an example of a subset of the discourse grammar representation is shown, denoted generally by reference numeral 160. Conversations or scenarios can be constructed by

combining all of the individual nodes along any one branch (from left to right) of the discourse grammar. For example, the scenario of servicing a customer's direct request for VMS (162) could involve some or all of the following: opening (164), legal guidelines (166), check availability (168), verify class of service (170), verify feature compatibility (172), ring options (174), due date (176), and close contact (178). The specific sub-topics employed would depend upon "customer" responses or constraints. That is, if the service is not available in the customer's area, the scenario would contain only opening (164), legal guidelines (166), check availability (168), and close contact (178).

It is further anticipated by Bloom et al., col. 17, lines 25-45, where it recites:

An application description preferably has a name, a list of screen definitions, the initial screen of the application, and a description of how to jump from screen-to-screen. An application screen describes one screen that has a name and a list of fields that make up that screen. The screen item describes an item of the screen and has a name by which it can be referred, a position and a size within the screen, and a default value. The value can be defined as a string or dynamically by a function. For example, a field showing the date or time would refer to a function, which supplies those strings. A screen label is a screen item which is not editable by the user. A screen field is a screen item which is editable by the user. An application field entry defines how items in the application should be filled out. This structure is to communicate commands when running a conversation, and to define how conversation specifics should be filled in. A screen sequence defines a sequence in which the screens are shown, and has a predicate which is applied to any conversation name to determine whether the sequence is appropriate for that conversation.

Claim 1's " (c) monitoring progress of the student toward the store goal; and" is anticipated by Bloom et al., col. 7, lines 20-30, where it recites:

Referring now to FIGS. 4 and 5, the function of exercise customer interaction skills (94) employs rehearsing conversations (116) or examining contact flow (118) as two different ways of rehearsing customer contacts. During rehearse conversation (116), tutor (112) supports trainees working through customer contacts representative of those faced on the job. As trainees work through the contacts, immediate feedback and hints (120) are available when trainees have difficulties. Moreover, at the end of each contact rehearsal, trainees are

provided summary feedback (122) including assessment of their current knowledge state.

Claim 1's "(d) providing feedback assisting the student in accomplishing the store goal." is anticipated by Bloom et al., col. 7, lines 20-30, where it recites:

Referring now to FIGS. 4 and 5, the function of exercise customer interaction skills (94) employs rehearsing conversations (116) or examining contact flow (118) as two different ways of rehearsing customer contacts. During rehearse conversation (116), tutor (112) supports trainees working through customer contacts representative of those faced on the job. As trainees work through the contacts, immediate feedback and hints (120) are available when trainees have difficulties. Moreover, at the end of each contact rehearsal, trainees are provided summary feedback (122) including assessment of their current knowledge state.

It is further anticipated by Bloom et al., col. 23, lines 30-45, where it recites:

At the end of each contact rehearsal or examination, the method and system of the present invention provide for several different types of feedback, selectable by the trainee. This approach includes a view summary feedback type where trainees can view a brief, digitized video of an expert CSR summarizing the salient points and features of the previous contact. A repeat conversation feedback type allows the trainee to redo the previous contact using the same or different instruction style settings for dialog and application interactions. With a selective review feedback type, the trainee can listen to all or part of the contact just practiced, reviewing and comparing their recorded responses to an expert recorded response. Finally, with a summarized progress feedback type, the trainee can view an assessment, including any changes, of the trainee's proficiency with regard to various topics.

Claim 10

Claim 10's "(a) a processor;" is anticipated by Bloom et al., col. 2, lines 50-55, where it recites:

Accordingly, it is the principle object of the present invention to provide an improved **computer based** intelligent tutoring method and system.

Claim 10's "(b) a memory that stores information under the control of the processor;" is anticipated by Bloom et al., col. 2, lines 50-55, where it recites:

Accordingly, it is the principle object of the present invention to provide an improved **computer based** intelligent tutoring method and system.

Claim 10's "(c) logic that receives indicia representative of a store goal, the indicia identifying training that is associated with the store goal , the store goal corresponding to a student being trained in an aspect of inventory administration for a store;" is anticipated by Bloom et al., col. 6, lines 40-67, where it recites:

In such a fashion, the method and system of the present invention are consistent with several features of the minimalist approach to training and learning. Specifically, the present invention employs task-based training, and allow trainees to start immediately on meaningful and realistic job tasks in any order. Moreover, the present invention keeps the amount of passive instruction to a minimum. Only prerequisite information that cannot be conveyed to the trainee during active contact rehearsal is conveyed through guide (92). In addition, information in guide (92) is presented in interactive, multimedia formats to increase the level of involvement by the trainee. Finally, the present invention contains explicit training on errors and error recovery to support the recognition and recovery from error, thereby making the learning materials more robust and complete, and training learners in error recovery skills.

Further, inventory is anticipated by Bloom et al., col. 1, lines 20-36, where it recites:

The CSR's job is a complicated one in which they are expected to handle all manner of customer calls regarding the provider's products and services. This means that they must simultaneously carry on a consultative conversation with the caller, manipulate service order and billing software to find out information about the caller, enter information regarding service registration, rapidly look-up information about **availability, compatibility and capabilities of the different products** and services from reference documentation, understand all of the features and incompatibilities of the offered services, and at times prepare mailings of information for the customer. These services and products, as well as the information about them, are frequently updated, producing an ongoing learning problem in order to "stay current". Because of this complexity, it may take a year or more of **training** and on-the-job experience for CSRs to become fully proficient.

Claim 10's "(d) logic that integrates retail information that provides assistance with achieving the store goal; and" is anticipated by Bloom et al., col. 15, lines 30-60, where it recites:

Still referring to FIG. 7, the discourse grammar (144) then maps onto sets of situation-action rules (146). Situation-action rules (146) are the individual transitions in the discourse grammar (144) describing actions to be taken in response to given situations. Situations can be either customer statements, requests, or questions, or service order software output or configurations. Actions can be either responses by the CSR to customer statements or to application information, commands or data entered into the application by the CSR, or actions focused around information processing and decision making, as previously described.

The next level of hierarchy (140) is conversations (148). Conversations (148) are syntactically correct sequences through discourse grammar (144) made up of sequences of situation-action rules (146). Each abstract situation and action in a conversation sequence is instantiated with specific information in the form of application commands or information, or text with accompanying audio. Conversations (148) are grouped together to reflect different types of scenarios that could occur between a caller and a CSR. Branches within conversations (148) are based on customer information. Situation-action rules (146) that are conceptually related map onto discourse grammar (144) nodes. These nodes are reusable portions of conversations that can appear in several different conversation scenarios. Ultimately, a specification of each of these layers defines a course, such as VMS. A course has a title, list of topics, a list of grammars, a list of activities (situations or actions), a list of conversations (subsuming text, audio, and application communication) and a list of application specifications.

It is further anticipated by Bloom et al., col. 16, lines 15-30, where it recites:

Referring now to FIG. 8, an example of a subset of the discourse grammar representation is shown, denoted generally by reference numeral 160. Conversations or scenarios can be constructed by combining all of the individual nodes along any one branch (from left to right) of the discourse grammar. For example, the scenario of servicing a customer's direct request for VMS (162) could involve some or all of the following: opening (164), legal guidelines (166), check availability (168), verify class of service (170), verify feature compatibility (172), ring options (174), due date (176), and close contact (178). The specific sub-topics employed would depend upon "customer" responses or constraints. That is, if the service is not available in the customer's area, the scenario would contain only opening (164), legal guidelines (166), check availability (168), and close contact (178).

It is further anticipated by Bloom et al., col. 17, lines 25-45, where it recites:

An application description preferably has a name, a list of screen definitions, the initial screen of the application, and a description of how to jump from screen-to-screen. An application screen describes one screen that has a name and a list of fields that make up that screen. The screen item describes an item of the screen and has a name by which it can be referred, a position and a size within the screen, and a default value. The value can be defined as a string or dynamically by a function. For example, a field showing the date or time would refer to a function, which supplies those strings. A screen label is a screen item which is not editable by the user. A screen field is a screen item which is editable by the user. An application field entry defines how items in the application should be filled out. This structure is to communicate commands when running a conversation, and to define how conversation specifics should be filled in. A screen sequence defines a sequence in which the screens are shown, and has a predicate which is applied to any conversation name to determine whether the sequence is appropriate for that conversation.

Claim 10's " (e) logic that monitors progress of the student toward the store goal and provides feedback that assists the student in accomplishing the store goal." is anticipated by Bloom et al., col. 7, lines 20-30, where it recites:

Referring now to FIGS. 4 and 5, the function of exercise customer interaction skills (94) employs rehearsing conversations (116) or examining contact flow (118) as two different ways of rehearsing customer contacts. During rehearse conversation (116), tutor (112) supports trainees working through customer contacts representative of those faced on the job. As trainees work through the contacts, immediate feedback and hints (120) are available when trainees have difficulties. Moreover, at the end of each contact rehearsal, trainees are provided summary feedback (122) including assessment of their current knowledge state.

Claim 19

Claim 19's "(a) receiving information indicative of a goal,-training that is associated with the goal , the goal corresponding to a student being trained in an aspect of inventory administration for a store;" is anticipated by Bloom et al., col. 6, lines 40-67, where it recites:

In such a fashion, the method and system of the present invention are consistent with several features of the minimalist approach to training and learning. Specifically, the present invention employs task-based training, and allow trainees to start immediately on meaningful and realistic job tasks in any order. Moreover, the present invention keeps the amount of passive instruction to a minimum. Only prerequisite information that cannot be conveyed to the trainee during active contact rehearsal is conveyed through guide (92). In addition, information in guide (92) is presented in interactive, multimedia formats to increase the level of involvement by the trainee. Finally, the present invention contains explicit training on errors and error recovery to support the recognition and recovery from error, thereby making the learning materials more robust and complete, and training learners in error recovery skills.

Further, inventory is anticipated by Bloom et al., col. 1, lines 20-36, where it recites:

The CSR's job is a complicated one in which they are expected to handle all manner of customer calls regarding the provider's products and services. This means that they must simultaneously carry on a consultative conversation with the caller, manipulate service order and billing software to find out information about the caller, enter information regarding service registration, rapidly look-up information about **availability, compatibility and capabilities of the different products** and services from reference documentation, understand all of the features and incompatibilities of the offered services, and at times prepare mailings of information for the customer. These services and products, as well as the information about them, are frequently updated, producing an ongoing learning problem in order to "stay current". Because of this complexity, it may take a year or more of **training** and on-the-job experience for CSRs to become fully proficient.

Claim 19's "(b) integrating information that motivates accomplishment of the goal; and" is anticipated by Bloom et al., col. 15, lines 30-60, where it recites:

Still referring to FIG. 7, the discourse grammar (144) then maps onto sets of situation-action rules (146). Situation-action rules (146) are the individual transitions in the discourse grammar (144) describing actions to be taken in response to given situations. Situations can be either customer statements, requests, or questions, or service order software output or configurations. Actions can be either responses by the CSR to customer statements or to application information, commands or data entered into the application by the CSR, or actions focused around information processing and decision making, as previously described.

The next level of hierarchy (140) is conversations (148). Conversations (148) are syntactically correct sequences through discourse grammar (144) made up of sequences of situation-action rules (146). Each abstract situation and action in a conversation sequence is instantiated with specific information in the form of application commands or information, or text with accompanying audio. Conversations (148) are grouped together to reflect different types of scenarios that could occur between a caller and a CSR. Branches within conversations (148) are based on customer information. Situation-action rules (146) that are conceptually related map onto discourse grammar (144) nodes. These nodes are reusable portions of conversations that can appear in several different conversation scenarios. Ultimately, a specification of each of these layers defines a course, such as VMS. A course has a title, list of topics, a list of grammars, a list of activities (situations or actions), a list of conversations (subsuming text, audio, and application communication) and a list of application specifications.

It is further anticipated by Bloom et al., col. 16, lines 15-30, where it recites:

Referring now to FIG. 8, an example of a subset of the discourse grammar representation is shown, denoted generally by reference numeral 160. Conversations or scenarios can be constructed by combining all of the individual nodes along any one branch (from left to right) of the discourse grammar. For example, the scenario of servicing a customer's direct request for VMS (162) could involve some or all of the following: opening (164), legal guidelines (166), check availability (168), verify class of service (170), verify feature compatibility (172), ring options (174), due date (176), and close contact (178). The specific sub-topics employed would depend upon "customer" responses or constraints. That is, if the service is not available in the customer's area, the scenario would contain only opening (164), legal guidelines (166), check availability (168), and close contact (178).

It is further anticipated by Bloom et al., col. 17, lines 25-45, where it recites:

An application description preferably has a name, a list of screen definitions, the initial screen of the application, and a description of how to jump from screen-to-screen. An application screen describes one screen that has a name and a list of fields that make up that screen. The screen item describes an item of the screen and has a name by which it can be referred, a position and a size within the screen, and a default value. The value can be defined as a string or dynamically by a function. For example, a field showing the date or time would refer to a function, which supplies those strings. A screen label is a screen item which is not editable by the user. A screen field is a screen item which is editable by the user. An application field entry defines how items in the application should be filled out. This structure is to communicate commands when running a conversation, and to define how conversation specifics should be filled in. A screen sequence defines a sequence in which the screens are shown, and has a predicate which is applied to any conversation name to determine whether the sequence is appropriate for that conversation.

Claim 19's "(c) evaluating the progress toward the goal and providing feedback that further motivates accomplishment of the goal." is anticipated by Bloom et al., col. 7, lines 20-30, where it recites:

Referring now to FIGS. 4 and 5, the function of exercise customer interaction skills (94) employs rehearsing conversations (116) or examining contact flow (118) as two different ways of rehearsing customer contacts. During rehearse conversation (116), tutor (112) supports trainees working through customer contacts representative of those faced on the job. As trainees work through the contacts, immediate feedback and hints (120) are available when trainees have difficulties. Moreover, at the end of each contact rehearsal, trainees are provided summary feedback (122) including assessment of their current knowledge state.

It is further anticipated by Bloom et al., col. 23, lines 30-45, where it recites:

At the end of each contact rehearsal or examination, the method and system of the present invention provide for several different types of feedback, selectable by the trainee. This approach includes a view summary feedback type where trainees can view a brief, digitized video of an expert CSR summarizing the salient points and features of the previous contact. A repeat conversation feedback type allows the trainee to redo the previous contact using the same or different instruction style settings for dialog and application interactions. With a selective review feedback type, the trainee can listen to all or part of the contact just practiced, reviewing and comparing their recorded responses to an expert recorded response. Finally, with a summarized progress feedback type, the trainee can view an assessment, including any changes, of the trainee's proficiency with regard to various topics.

Claim 28

Claim 28's "(a) a processor;" is anticipated by Bloom et al., col. 2, lines 50-55, where it recites:

Accordingly, it is the principle object of the present invention to provide an improved **computer based** intelligent tutoring method and system.

Claim 28's "(b) a memory that stores information under the control of the processor;" is anticipated by Bloom et al., col. 2, lines 50-55, where it recites:

Accordingly, it is the principle object of the present invention to provide an improved **computer based** intelligent tutoring method and system.

Claim 28's "(c) logic that receives information indicative of a goal, the information identifying training that is associated with the goal , the goal corresponding to a student being trained in an aspect of inventory administration for a store;" is anticipated by Bloom et al., col. 6, lines 40-67, where it recites:

In such a fashion, the method and system of the present invention are consistent with several features of the minimalist approach to training and learning. Specifically, the present invention employs task-based training, and allow trainees to start immediately on meaningful and realistic job tasks in any order. Moreover, the present invention keeps the amount of passive instruction to a minimum. Only prerequisite information that cannot be conveyed to the trainee during active contact rehearsal is conveyed through guide (92). In addition, information in guide (92) is presented in interactive, multimedia formats to increase the level of involvement by the trainee. Finally, the present invention contains explicit training on errors and error recovery to support the recognition and recovery from error, thereby making the learning materials more robust and complete, and training learners in error recovery skills.

Further, inventory is anticipated by Bloom et al., col. 1, lines 20-36, where it recites:

The CSR's job is a complicated one in which they are expected to handle all manner of customer calls regarding the provider's products and services. This means that they must simultaneously carry on a consultative conversation with the caller, manipulate service order and billing software to find out information about the caller, enter information regarding service registration, rapidly look-up information about **availability, compatibility and capabilities of the different products** and services from reference documentation, understand all of the features and incompatibilities of the offered services, and at times prepare mailings of information for the customer. These services and products, as well as the information about them, are frequently updated, producing an ongoing learning problem in order to "stay current". Because of this

complexity, it may take a year or more of **training** and on-the-job experience for CSRs to become fully proficient.

Claim 28's "(d) logic that integrates information that motivates accomplishment of the goal; and" is anticipated by Bloom et al., col. 15, lines 30-60, where it recites:

Still referring to FIG. 7, the discourse grammar (144) then maps onto sets of situation-action rules (146). Situation-action rules (146) are the individual transitions in the discourse grammar (144) describing actions to be taken in response to given situations. Situations can be either customer statements, requests, or questions, or service order software output or configurations. Actions can be either responses by the CSR to customer statements or to application information, commands or data entered into the application by the CSR, or actions focused around information processing and decision making, as previously described.

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Referring now to FIG. 8, an example of a subset of the discourse grammar representation is shown, denoted generally by reference numeral 160. Conversations or scenarios can be constructed by combining all of the individual nodes along any one branch (from left to right) of the discourse grammar. For example, the scenario of servicing a customer's direct request for VMS (162) could involve some or all of the following: opening (164), legal guidelines (166), check availability (168), verify class of service (170), verify feature compatibility (172), ring

options (174), due date (176), and close contact (178). The specific sub-topics employed would depend upon "customer" responses or constraints. That is, if the service is not available in the customer's area, the scenario would contain only opening (164), legal guidelines (166), check availability (168), and close contact (178).

It is further anticipated by Bloom et al., col. 17, lines 25-45, where it recites:

An application description preferably has a name, a list of screen definitions, the initial screen of the application, and a description of how to jump from screen-to-screen. An application screen describes one screen that has a name and a list of fields that make up that screen. The screen item describes an item of the screen and has a name by which it can be referred, a position and a size within the screen, and a default value. The value can be defined as a string or dynamically by a function. For example, a field showing the date or time would refer to a function, which supplies those strings. A screen label is a screen item which is not editable by the user. A screen field is a screen item which is editable by the user. An application field entry defines how items in the application should be filled out. This structure is to communicate commands when running a conversation, and to define how conversation specifics should be filled in. A screen sequence defines a sequence in which the screens are shown, and has a predicate which is applied to any conversation name to determine whether the sequence is appropriate for that conversation.

Claim 28's "(e) logic that evaluates the progress toward the goal and provides feedback that further motivates accomplishment of the goal." is anticipated by Bloom et al., col. 7, lines 20-30, where it recites:

Referring now to FIGS. 4 and 5, the function of exercise customer interaction skills (94) employs rehearsing conversations (116) or examining contact flow (118) as two different ways of rehearsing customer contacts. During rehearse conversation (116), tutor (112) supports trainees working through customer contacts representative of those faced on the job. As trainees work through the contacts, immediate feedback and hints (120) are available when trainees have difficulties. Moreover, at the end of each contact rehearsal, trainees are provided summary feedback (122) including assessment of their current knowledge state.

It is further anticipated by Bloom et al., col. 23, lines 30-45, where it recites:

At the end of each contact rehearsal or examination, the method and system of the present invention provide for several different types of feedback, selectable by the trainee. This approach includes a view summary feedback type where trainees can view a brief, digitized video of an expert CSR summarizing the salient points and features of the previous contact. A repeat conversation feedback type allows the trainee to redo the previous contact using the same or different instruction style settings for dialog and application interactions. With a selective review feedback type, the trainee can listen to all or part of the contact just practiced, reviewing and comparing their recorded responses to an expert recorded response. Finally, with a summarized progress feedback type, the trainee can view an assessment, including any changes, of the trainee's proficiency with regard to various topics.

Claim 36

Claim 36's "(a) presenting information indicative of a goal, the information identifying training that is associated with the goal , the goal corresponding to a student being trained in an aspect of inventory administration for a store;" is anticipated by Bloom et al., col. 6, lines 40-67, where it recites:

In such a fashion, the method and system of the present invention are consistent with several features of the minimalist approach to training and learning. Specifically, the present invention employs task-based training, and allow trainees to start immediately on meaningful and realistic job tasks in any order. Moreover, the present invention keeps the amount of passive instruction to a minimum. Only prerequisite information that cannot be conveyed to the trainee during active contact rehearsal is conveyed through guide (92). In addition, information in guide (92) is presented in interactive, multimedia formats to increase the level of involvement by the trainee. Finally, the present invention contains explicit training on errors and error recovery to support the recognition and recovery from error, thereby making the learning materials more robust and complete, and training learners in error recovery skills.

Further, inventory is anticipated by Bloom et al., col. 1, lines 20-36, where it recites:

The CSR's job is a complicated one in which they are expected to handle all manner of customer calls regarding the provider's products and services. This means that they must simultaneously carry on a consultative conversation with the caller, manipulate service order and billing software to find out information about the caller, enter information regarding service registration, rapidly look-up information about **availability, compatibility and capabilities of the different products** and services from reference documentation, understand all of the features and incompatibilities of the offered services, and at times prepare mailings of information for the customer. These services and products, as well as the information about them, are frequently updated, producing an ongoing learning problem in order to "stay current". Because of this complexity, it may take a year or more of **training** and on-the-job experience for CSRs to become fully proficient.

Claim 36's "(b) integrating information that motivates accomplishment of the goal" is anticipated by Bloom et al., col. 15, lines 30-60, where it recites:

Still referring to FIG. 7, the discourse grammar (144) then maps onto sets of situation-action rules (146). Situation-action rules (146) are the individual transitions in the discourse grammar (144) describing actions to be taken in response to given situations. Situations can be either customer statements, requests, or questions, or service order software output or configurations. Actions can be either responses by the CSR to customer statements or to application information, commands or data entered into the application by the CSR, or actions focused around information processing and decision making, as previously described.

The next level of hierarchy (140) is conversations (148). Conversations (148) are syntactically correct sequences through discourse grammar (144) made up of sequences of situation-action rules (146). Each abstract situation and action in a conversation sequence is instantiated with specific information in the form of application commands or information, or text with accompanying audio. Conversations (148) are grouped together to reflect different types of scenarios that could occur between a caller and a CSR. Branches within conversations (148) are based on customer information. Situation-action rules (146) that are conceptually related map onto discourse grammar (144) nodes. These nodes are reusable portions of conversations that can appear in several different conversation scenarios. Ultimately, a specification of each of

these layers defines a course, such as VMS. A course has a title, list of topics, a list of grammars, a list of activities (situations or actions), a list of conversations (subsuming text, audio, and application communication) and a list of application specifications.

It is further anticipated by Bloom et al., col. 16, lines 15-30, where it recites:

Referring now to FIG. 8, an example of a subset of the discourse grammar representation is shown, denoted generally by reference numeral 160. Conversations or scenarios can be constructed by combining all of the individual nodes along any one branch (from left to right) of the discourse grammar. For example, the scenario of servicing a customer's direct request for VMS (162) could involve some or all of the following: opening (164), legal guidelines (166), check availability (168), verify class of service (170), verify feature compatibility (172), ring options (174), due date (176), and close contact (178). The specific sub-topics employed would depend upon "customer" responses or constraints. That is, if the service is not available in the customer's area, the scenario would contain only opening (164), legal guidelines (166), check availability (168), and close contact (178).

It is further anticipated by Bloom et al., col. 17, lines 25-45, where it recites:

An application description preferably has a name, a list of screen definitions, the initial screen of the application, and a description of how to jump from screen-to-screen. An application screen describes one screen that has a name and a list of fields that make up that screen. The screen item describes an item of the screen and has a name by which it can be referred, a position and a size within the screen, and a default value. The value can be defined as a string or dynamically by a function. For example, a field showing the date or time would refer to a function, which supplies those strings. A screen label is a screen item which is not editable by the user. A screen field is a screen item which is editable by the user. An application field entry defines how items in the application should be filled out. This structure is to communicate commands when running a conversation, and to define how conversation specifics should be filled in. A screen sequence defines a sequence in which the screens are shown, and has a predicate which is applied to any conversation name to determine whether the sequence is appropriate for that conversation.

Claim 36's "(c) querying a user for answers to one or more questions based on one or more learning objectives of the presentation using a simulated human conversation; and" is anticipated by Bloom et al., col. 16, lines 59-67, where it recites:

In the situation-action rules (146) level, an activity preferably has a name by which it can be referenced within an RTN, a text that describes the activity, the grammars within which it is used, the topics that it relates to, a comment from the author of the material, instances from the conversations shown as text, instances from the conversations referring to audio files, and a reference to the student's encounters with this activity. An action has feedback which can be presented to the student as a hint, and false responses which are actions to present as false distractors when giving a **multiple choice question**. An application action is an action describing interaction with application software.

Claim 36's "(d) monitoring progress toward the goal and providing feedback that further motivates accomplishment of the goal." is anticipated by Bloom et al., col. 7, lines 20-30, where it recites:

Referring now to FIGS. 4 and 5, the function of exercise customer interaction skills (94) employs rehearsing conversations (116) or examining contact flow (118) as two different ways of rehearsing customer contacts. During rehearse conversation (116), tutor (112) supports trainees working through customer contacts representative of those faced on the job. As trainees work through the contacts, immediate feedback and hints (120) are available when trainees have difficulties. Moreover, at the end of each contact rehearsal, trainees are provided summary feedback (122) including assessment of their current knowledge state.

Claim 45

Claim 45's "(a) a processor;" is anticipated by Bloom et al., col. 2, lines 50-55, where it recites:

Accordingly, it is the principle object of the present invention to provide an improved **computer based** intelligent tutoring method and system.

Claim 45's "(b) a memory that stores information under the control of the processor;" is anticipated by Bloom et al., col. 2, lines 50-55, where it recites:

Accordingly, it is the principle object of the present invention to provide an improved **computer based** intelligent tutoring method and system.

Claim 45's "(c) logic that presents information indicative of a goal, the information identifying training that is associated with the goal , the goal corresponding to a student being trained in an aspect of inventory administration for a store;" is anticipated by Bloom et al., col. 6, lines 40-67, where it recites:

In such a fashion, the method and system of the present invention are consistent with several features of the minimalist approach to training and learning. Specifically, the present invention employs task-based training, and allow trainees to start immediately on meaningful and realistic job tasks in any order. Moreover, the present invention keeps the amount of passive instruction to a minimum. Only prerequisite information that cannot be conveyed to the trainee during active contact rehearsal is conveyed through guide (92). In addition, information in guide (92) is presented in interactive, multimedia formats to increase the level of involvement by the trainee. Finally, the present invention contains explicit training on errors and error recovery to support the recognition and recovery from error, thereby making the learning materials more robust and complete, and training learners in error recovery skills.

Further, inventory is anticipated by Bloom et al., col. 1, lines 20-36, where it recites:

The CSR's job is a complicated one in which they are expected to handle all manner of customer calls regarding the provider's products and services. This means that they must simultaneously carry on a consultative conversation with the caller, manipulate service order and billing software to find out information about the caller, enter information regarding service registration, rapidly look-up information about **availability, compatibility and capabilities of the different products** and services from reference documentation, understand all of the features and incompatibilities of the offered services, and at times prepare mailings of information for the customer. These services and products, as well as the information about them, are frequently updated, producing an ongoing learning problem in order to "stay current". Because of this complexity, it may take a year or more of **training** and on-the-job experience for CSRs to become fully proficient.

Claim 45's "(d) logic that integrates information that motivates accomplishment of the goal" is anticipated by Bloom et al., col. 15, lines 30-60, where it recites:

Still referring to FIG. 7, the discourse grammar (144) then maps onto sets of situation-action rules (146). Situation-action rules (146) are the individual transitions in the discourse grammar (144) describing actions to be taken in response to given situations. Situations can be either customer statements, requests, or questions, or service order software output or configurations. Actions can be either responses by the CSR to customer statements or to application information, commands or data entered into the application by the CSR, or actions focused around information processing and decision making, as previously described.

The next level of hierarchy (140) is conversations (148). Conversations (148) are syntactically correct sequences through discourse grammar (144) made up of sequences of situation-action rules (146). Each abstract situation and action in a conversation sequence is instantiated with specific information in the form of application commands or information, or text with accompanying audio. Conversations (148) are grouped together to reflect different types of scenarios that could occur between a caller and a CSR. Branches within conversations (148) are based on customer information. Situation-action rules (146) that are conceptually related map onto discourse grammar (144) nodes. These nodes are reusable portions of conversations that can appear in several different conversation scenarios. Ultimately, a specification of each of these layers defines a course, such as VMS. A course has a title, list of topics, a list of grammars, a list of activities (situations or actions), a list of conversations (subsuming text, audio, and application communication) and a list of application specifications.

It is further anticipated by Bloom et al., col. 16, lines 15-30, where it recites:

Referring now to FIG. 8, an example of a subset of the discourse grammar representation is shown, denoted generally by reference numeral 160. Conversations or scenarios can be constructed by combining all of the individual nodes along any one branch (from left to right) of the discourse grammar. For example, the scenario of servicing a customer's direct request for VMS (162) could involve some or all of the following: opening (164), legal guidelines (166), check availability (168), verify class of service (170), verify feature compatibility (172), ring options (174), due date (176), and close contact (178). The specific sub-topics employed would depend upon "customer" responses or constraints. That is, if the service is not available in the customer's area, the scenario would contain only opening (164), legal guidelines (166), check availability (168), and close contact (178).

It is further anticipated by Bloom et al., col. 17, lines 25-45, where it recites:

An application description preferably has a name, a list of screen definitions, the initial screen of the application, and a description of how to jump from screen-to-screen. An application screen describes one screen that has a name and a list of fields that make up that screen. The screen item describes an item of the screen and has a name by which it can be referred, a position and a size within the screen, and a default value. The value can be defined as a string or dynamically by a function. For example, a field showing the date or time would refer to a function, which supplies those strings. A screen label is a screen item which is not editable by the user. A screen field is a screen item which is editable by the user. An application field entry defines how items in the application should be filled out. This structure is to communicate commands when running a conversation, and to define how conversation specifics should be filled in. A screen sequence defines a sequence in which the screens are shown, and has a predicate which is applied to any conversation name to determine whether the sequence is appropriate for that conversation.

Claim 45's "(e) logic that queries a user for answers to one or more questions based on more or more learning objectives of the presentation using a simulated human conversation; and" is anticipated by Bloom et al., col. 16, lines 59-67, where it recites:

In the situation-action rules (146) level, an activity preferably has a name by which it can be referenced within an RTN, a text that describes the activity, the grammars within which it is used, the topics that it relates to, a comment from the author of the material, instances from the conversations shown as text, instances from the conversations referring to audio files, and a reference to the student's encounters with this activity. An action has feedback which can be presented to the student as a hint, and false responses which are actions to present as false distractors when giving a **multiple choice question**. An application action is an action describing interaction with application software.

Claim 45's "(f) logic that monitors progress toward the goal and provides feedback that further motivates accomplishment of the goal." is anticipated by Bloom et al., col. 7, lines 20-30, where it recites:

Referring now to FIGS. 4 and 5, the function of exercise customer interaction skills (94) employs rehearsing conversations (116) or examining contact flow (118) as two different ways of rehearsing customer contacts. During rehearse conversation (116), tutor (112) supports trainees working through customer contacts representative of those faced on the job. As trainees work through the contacts, immediate feedback and hints (120) are available when trainees have difficulties. Moreover, at the end of each contact rehearsal, trainees are provided summary feedback (122) including assessment of their current knowledge state.

Claim 54

Claim 54's "(a) presenting information indicative of a goal, the information identifying training that is associated with the goal , the goal corresponding to a student being trained in an aspect of inventory administration for a store;" is anticipated by Bloom et al., col. 6, lines 40-67, where it recites:

In such a fashion, the method and system of the present invention are consistent with several features of the minimalist approach to training and learning. Specifically, the present invention employs task-based training, and allow trainees to start immediately on meaningful and

realistic job tasks in any order. Moreover, the present invention keeps the amount of passive instruction to a minimum. Only prerequisite information that cannot be conveyed to the trainee during active contact rehearsal is conveyed through guide (92). In addition, information in guide (92) is presented in interactive, multimedia formats to increase the level of involvement by the trainee. Finally, the present invention contains explicit training on errors and error recovery to support the recognition and recovery from error, thereby making the learning materials more robust and complete, and training learners in error recovery skills.

Further, inventory is anticipated by Bloom et al., col. 1, lines 20-36, where it recites:

The CSR's job is a complicated one in which they are expected to handle all manner of customer calls regarding the provider's products and services. This means that they must simultaneously carry on a consultative conversation with the caller, manipulate service order and billing software to find out information about the caller, enter information regarding service registration, rapidly look-up information about **availability, compatibility and capabilities of the different products** and services from reference documentation, understand all of the features and incompatibilities of the offered services, and at times prepare mailings of information for the customer. These services and products, as well as the information about them, are frequently updated, producing an ongoing learning problem in order to "stay current". Because of this complexity, it may take a year or more of **training** and on-the-job experience for CSRs to become fully proficient.

Claim 54's "(b) integrating information that motivates accomplishment of the goal; and" is anticipated by Bloom et al., col. 15, lines 30-60, where it recites:

Still referring to FIG. 7, the discourse grammar (144) then maps onto sets of situation-action rules (146). Situation-action rules (146) are the individual transitions in the discourse grammar (144) describing actions to be taken in response to given situations. Situations can be either customer statements, requests, or questions, or service order software output or configurations. Actions can be either responses by the CSR to customer statements or to application information, commands or data entered into the application by the CSR, or actions focused around information processing and decision making, as previously described.

The next level of hierarchy (140) is conversations (148). Conversations (148) are syntactically correct sequences through discourse grammar (144) made up of sequences of situation-action rules (146). Each abstract situation and action in a conversation sequence is instantiated with specific information in the form of application commands or information, or text with accompanying audio. Conversations (148) are grouped together to reflect different types of scenarios that could occur between a caller and a CSR. Branches within conversations (148) are based on customer information. Situation-action rules (146) that are conceptually related map onto discourse grammar (144) nodes. These nodes are reusable portions of conversations that can appear in several different conversation scenarios. Ultimately, a specification of each of these layers defines a course, such as VMS. A course has a title, list of topics, a list of grammars, a list of activities (situations or actions), a list of conversations (subsuming text, audio, and application communication) and a list of application specifications.

It is further anticipated by Bloom et al., col. 16, lines 15-30, where it recites:

Referring now to FIG. 8, an example of a subset of the discourse grammar representation is shown, denoted generally by reference numeral 160. Conversations or scenarios can be constructed by combining all of the individual nodes along any one branch (from left to right) of the discourse grammar. For example, the scenario of servicing a customer's direct request for VMS (162) could involve some or all of the following: opening (164), legal guidelines (166), check availability (168), verify class of service (170), verify feature compatibility (172), ring options (174), due date (176), and close contact (178). The specific sub-topics employed would depend upon "customer" responses or constraints. That is, if the service is not available in the customer's area, the scenario would contain only opening (164), legal guidelines (166), check availability (168), and close contact (178).

It is further anticipated by Bloom et al., col. 17, lines 25-45, where it recites:

An application description preferably has a name, a list of screen definitions, the initial screen of the application, and a description of how to jump from screen-to-screen. An application screen describes one screen that has a name and a list of fields that make up that screen. The screen item describes an item of the screen and has a name by which it can be referred, a position and a size within the screen, and a default value. The value can be defined as a string or dynamically by a function. For example, a field showing the date or time would refer to a function, which supplies those strings. A screen label is a screen item which is not editable by the user. A screen field is a screen item which is editable

by the user. An application field entry defines how items in the application should be filled out. This structure is to communicate commands when running a conversation, and to define how conversation specifics should be filled in. A screen sequence defines a sequence in which the screens are shown, and has a predicate which is applied to any conversation name to determine whether the sequence is appropriate for that conversation.

Claim 54's "(c) monitoring progress toward the goal and providing feedback that further motivates accomplishment of the goal." is anticipated by Bloom et al., col. 7, lines 20-30, where it recites:

Referring now to FIGS. 4 and 5, the function of exercise customer interaction skills (94) employs rehearsing conversations (116) or examining contact flow (118) as two different ways of rehearsing customer contacts. During rehearse conversation (116), tutor (112) supports trainees working through customer contacts representative of those faced on the job. As trainees work through the contacts, immediate feedback and hints (120) are available when trainees have difficulties. Moreover, at the end of each contact rehearsal, trainees are provided summary feedback (122) including assessment of their current knowledge state.

Claim 63

Claim 63's "(a) a processor;" is anticipated by Bloom et al., col. 2, lines 50-55, where it recites:

Accordingly, it is the principle object of the present invention to provide an improved **computer based** intelligent tutoring method and system.

Claim 63's "(b) a memory that stores information under the control of the processor;" is anticipated by Bloom et al., col. 2, lines 50-55, where it recites:

Accordingly, it is the principle object of the present invention to provide an improved **computer based** intelligent tutoring method and system.

Claim 63's "(c) logic that presents information indicative of a goal, the information identifying training that is associated with the goal , the goal corresponding to a student being trained in an aspect of inventory administration for a store;" is anticipated by Bloom et al., col. 6, lines 40-67, where it recites:

In such a fashion, the method and system of the present invention are consistent with several features of the minimalist approach to training and learning. Specifically, the present invention employs task-based training, and allow trainees to start immediately on meaningful and realistic job tasks in any order. Moreover, the present invention keeps the amount of passive instruction to a minimum. Only prerequisite information that cannot be conveyed to the trainee during active contact rehearsal is conveyed through guide (92). In addition, information in guide (92) is presented in interactive, multimedia formats to increase the level of involvement by the trainee. Finally, the present invention contains explicit training on errors and error recovery to support the recognition and recovery from error, thereby making the learning materials more robust and complete, and training learners in error recovery skills.

Further, inventory is anticipated by Bloom et al., col. 1, lines 20-36, where it recites:

The CSR's job is a complicated one in which they are expected to handle all manner of customer calls regarding the provider's products and services. This means that they must simultaneously carry on a consultative conversation with the caller, manipulate service order and billing software to find out information about the caller, enter information regarding service registration, rapidly look-up information about **availability, compatibility and capabilities of the different products** and services from reference documentation, understand all of the features and incompatibilities of the offered services, and at times prepare mailings of information for the customer. These services and products, as well as the information about them, are frequently updated, producing an ongoing learning problem in order to "stay current". Because of this

complexity, it may take a year or more of **training** and on-the-job experience for CSRs to become fully proficient.

Claim 63's "(d) logic that integrates information that motivates accomplishment of the goal; and" is anticipated by Bloom et al., col. 15, lines 30-60, where it recites:

Still referring to FIG. 7, the discourse grammar (144) then maps onto sets of situation-action rules (146). Situation-action rules (146) are the individual transitions in the discourse grammar (144) describing actions to be taken in response to given situations. Situations can be either customer statements, requests, or questions, or service order software output or configurations. Actions can be either responses by the CSR to customer statements or to application information, commands or data entered into the application by the CSR, or actions focused around information processing and decision making, as previously described.

The next level of hierarchy (140) is conversations (148). Conversations (148) are syntactically correct sequences through discourse grammar (144) made up of sequences of situation-action rules (146). Each abstract situation and action in a conversation sequence is instantiated with specific information in the form of application commands or information, or text with accompanying audio. Conversations (148) are grouped together to reflect different types of scenarios that could occur between a caller and a CSR. Branches within conversations (148) are based on customer information. Situation-action rules (146) that are conceptually related map onto discourse grammar (144) nodes. These nodes are reusable portions of conversations that can appear in several different conversation scenarios. Ultimately, a specification of each of these layers defines a course, such as VMS. A course has a title, list of topics, a list of grammars, a list of activities (situations or actions), a list of conversations (subsuming text, audio, and application communication) and a list of application specifications.

It is further anticipated by Bloom et al., col. 16, lines 15-30, where it recites:

Referring now to FIG. 8, an example of a subset of the discourse grammar representation is shown, denoted generally by reference numeral 160. Conversations or scenarios can be constructed by combining all of the individual nodes along any one branch (from left to right) of the discourse grammar. For example, the scenario of servicing a customer's direct request for VMS (162) could involve some or all of the following: opening (164), legal guidelines (166), check availability (168), verify class of service (170), verify feature compatibility (172), ring

options (174), due date (176), and close contact (178). The specific sub-topics employed would depend upon "customer" responses or constraints. That is, if the service is not available in the customer's area, the scenario would contain only opening (164), legal guidelines (166), check availability (168), and close contact (178).

It is further anticipated by Bloom et al., col. 17, lines 25-45, where it recites:

An application description preferably has a name, a list of screen definitions, the initial screen of the application, and a description of how to jump from screen-to-screen. An application screen describes one screen that has a name and a list of fields that make up that screen. The screen item describes an item of the screen and has a name by which it can be referred, a position and a size within the screen, and a default value. The value can be defined as a string or dynamically by a function. For example, a field showing the date or time would refer to a function, which supplies those strings. A screen label is a screen item which is not editable by the user. A screen field is a screen item which is editable by the user. An application field entry defines how items in the application should be filled out. This structure is to communicate commands when running a conversation, and to define how conversation specifics should be filled in. A screen sequence defines a sequence in which the screens are shown, and has a predicate which is applied to any conversation name to determine whether the sequence is appropriate for that conversation.

Claim 63's "(e) monitoring progress toward the goal and providing feedback that further motivates accomplishment of the goal." is anticipated by Bloom et al., col. 7, lines 20-30, where it recites:

Referring now to FIGS. 4 and 5, the function of exercise customer interaction skills (94) employs rehearsing conversations (116) or examining contact flow (118) as two different ways of rehearsing customer contacts. During rehearse conversation (116), tutor (112) supports trainees working through customer contacts representative of those faced on the job. As trainees work through the contacts, immediate feedback and hints (120) are available when trainees have difficulties. Moreover, at the end of each contact rehearsal, trainees are provided summary feedback (122) including assessment of their current knowledge state.

Claim 72

Claim 72's "(a) receiving indicia representative of a goal, the indicia identifying training that is associated with the store goal , the goal corresponding to a student being trained in an aspect of inventory administration for a store;" is anticipated by Bloom et al., col. 6, lines 40-67, where it recites:

In such a fashion, the method and system of the present invention are consistent with several features of the minimalist approach to training and learning. Specifically, the present invention employs task-based training, and allow trainees to start immediately on meaningful and realistic job tasks in any order. Moreover, the present invention keeps the amount of passive instruction to a minimum. Only prerequisite information that cannot be conveyed to the trainee during active contact rehearsal is conveyed through guide (92). In addition, information in guide (92) is presented in interactive, multimedia formats to increase the level of involvement by the trainee. Finally, the present invention contains explicit training on errors and error recovery to support the recognition and recovery from error, thereby making the learning materials more robust and complete, and training learners in error recovery skills.

Further, inventory is anticipated by Bloom et al., col. 1, lines 20-36, where it recites:

The CSR's job is a complicated one in which they are expected to handle all manner of customer calls regarding the provider's products and services. This means that they must simultaneously carry on a consultative conversation with the caller, manipulate service order and billing software to find out information about the caller, enter information regarding service registration, rapidly look-up information about **availability, compatibility and capabilities of the different products** and services from reference documentation, understand all of the features and incompatibilities of the offered services, and at times prepare mailings of information for the customer. These services and products, as well as the information about them, are frequently updated, producing an ongoing learning problem in order to "stay current". Because of this complexity, it may take a year or more of **training** and on-the-job experience for CSRs to become fully proficient.

Claim 72's "(b) integrating examples into the presentation to provide assistance with achieving the goal" is anticipated by Bloom et al., col. 15, lines 30-60, where it recites:

Still referring to FIG. 7, the discourse grammar (144) then maps onto sets of situation-action rules (146). Situation-action rules (146) are the individual transitions in the discourse grammar (144) describing actions to be taken in response to given situations. Situations can be either customer statements, requests, or questions, or service order software output or configurations. Actions can be either responses by the CSR to customer statements or to application information, commands or data entered into the application by the CSR, or actions focused around information processing and decision making, as previously described.

The next level of hierarchy (140) is conversations (148). Conversations (148) are syntactically correct sequences through discourse grammar (144) made up of sequences of situation-action rules (146). Each abstract situation and action in a conversation sequence is instantiated with specific information in the form of application commands or information, or text with accompanying audio. Conversations (148) are grouped together to reflect different types of scenarios that could occur between a caller and a CSR. Branches within conversations (148) are based on customer information. Situation-action rules (146) that are conceptually related map onto discourse grammar (144) nodes. These nodes are reusable portions of conversations that can appear in several different conversation scenarios. Ultimately, a specification of each of these layers defines a course, such as VMS. A course has a title, list of topics, a list of grammars, a list of activities (situations or actions), a list of conversations (subsuming text, audio, and application communication) and a list of application specifications.

It is further anticipated by Bloom et al., col. 16, lines 15-30, where it recites:

Referring now to FIG. 8, an example of a subset of the discourse grammar representation is shown, denoted generally by reference numeral 160. Conversations or scenarios can be constructed by combining all of the individual nodes along any one branch (from left to right) of the discourse grammar. For example, the scenario of servicing a customer's direct request for VMS (162) could involve some or all of the following: opening (164), legal guidelines (166), check availability (168), verify class of service (170), verify feature compatibility (172), ring options (174), due date (176), and close contact (178). The specific sub-topics employed would depend upon "customer" responses or

constraints. That is, if the service is not available in the customer's area, the scenario would contain only opening (164), legal guidelines (166), check availability (168), and close contact (178).

It is further anticipated by Bloom et al., col. 17, lines 25-45, where it recites:

An application description preferably has a name, a list of screen definitions, the initial screen of the application, and a description of how to jump from screen-to-screen. An application screen describes one screen that has a name and a list of fields that make up that screen. The screen item describes an item of the screen and has a name by which it can be referred, a position and a size within the screen, and a default value. The value can be defined as a string or dynamically by a function. For example, a field showing the date or time would refer to a function, which supplies those strings. A screen label is a screen item which is not editable by the user. A screen field is a screen item which is editable by the user. An application field entry defines how items in the application should be filled out. This structure is to communicate commands when running a conversation, and to define how conversation specifics should be filled in. A screen sequence defines a sequence in which the screens are shown, and has a predicate which is applied to any conversation name to determine whether the sequence is appropriate for that conversation.

Claim 72's "(c) monitoring progress of a student toward the goal;" is anticipated by Bloom et al., col. 7, lines 20-30, where it recites:

Referring now to FIGS. 4 and 5, the function of exercise customer interaction skills (94) employs rehearsing conversations (116) or examining contact flow (118) as two different ways of rehearsing customer contacts. During rehearse conversation (116), tutor (112) supports trainees working through customer contacts representative of those faced on the job. As trainees work through the contacts, immediate feedback and hints (120) are available when trainees have difficulties. Moreover, at the end of each contact rehearsal, trainees are provided summary feedback (122) including assessment of their current knowledge state.

Claim 72's "(d) providing feedback that further assists the student in accomplishing the goal; and" is anticipated by Bloom et al., col. 7, lines 20-30, where it recites:

Referring now to FIGS. 4 and 5, the function of exercise customer interaction skills (94) employs rehearsing conversations (116) or examining contact flow (118) as two different ways of rehearsing customer contacts. During rehearse conversation (116), tutor (112) supports trainees working through customer contacts representative of those faced on the job. As trainees work through the contacts, immediate feedback and hints (120) are available when trainees have difficulties. Moreover, at the end of each contact rehearsal, trainees are provided summary feedback (122) including assessment of their current knowledge state.

It is further anticipated by Bloom et al., col. 23, lines 30-45, where it recites:

At the end of each contact rehearsal or examination, the method and system of the present invention provide for several different types of feedback, selectable by the trainee. This approach includes a view summary feedback type where trainees can view a brief, digitized video of an expert CSR summarizing the salient points and features of the previous contact. A repeat conversation feedback type allows the trainee to redo the previous contact using the same or different instruction style settings for dialog and application interactions. With a selective review feedback type, the trainee can listen to all or part of the contact just practiced, reviewing and comparing their recorded responses to an expert recorded response. Finally, with a summarized progress feedback type, the trainee can view an assessment, including any changes, of the trainee's proficiency with regard to various topics.

Claim 72's "(e) providing information to assist with a next step in achieving the goal." is anticipated by Bloom et al., col. 7, lines 20-30, where it recites:

Referring now to FIGS. 4 and 5, the function of exercise customer interaction skills (94) employs rehearsing conversations (116) or examining contact flow (118) as two different ways of rehearsing customer contacts. During rehearse conversation (116), tutor (112)

supports trainees working through customer contacts representative of those faced on the job. As trainees work through the contacts, immediate feedback and hints (120) are available when trainees have difficulties. Moreover, at the end of each contact rehearsal, trainees are provided summary feedback (122) including assessment of their current knowledge state.

It is further anticipated by Bloom et al., col. 23, lines 30-45, where it recites:

At the end of each contact rehearsal or examination, the method and system of the present invention provide for several different types of feedback, selectable by the trainee. This approach includes a view summary feedback type where trainees can view a brief, digitized video of an expert CSR summarizing the salient points and features of the previous contact. A repeat conversation feedback type allows the trainee to redo the previous contact using the same or different instruction style settings for dialog and application interactions. With a selective review feedback type, the trainee can listen to all or part of the contact just practiced, reviewing and comparing their recorded responses to an expert recorded response. Finally, with a summarized progress feedback type, the trainee can view an assessment, including any changes, of the trainee's proficiency with regard to various topics.

Claim 81

Claim 81's "(a) a processor;" is anticipated by Bloom et al., col. 2, lines 50-55, where it recites:

Accordingly, it is the principle object of the present invention to provide an improved **computer based** intelligent tutoring method and system.

Claim 81's "(b) a memory that stores information under the control of the processor;" is anticipated by Bloom et al., col. 2, lines 50-55, where it recites:

Accordingly, it is the principle object of the present invention to provide an improved **computer based** intelligent tutoring method and system.

Claim 81's "(c) logic that integrates examples into the presentation to provide assistance with achieving the goal, the examples providing training that is associated with the goal , the goal corresponding to a student being trained in an aspect of inventory administration for a store;" is anticipated by Bloom et al., col. 15, lines 30-60, where it recites:

Still referring to FIG. 7, the discourse grammar (144) then maps onto sets of situation-action rules (146). Situation-action rules (146) are the individual transitions in the discourse grammar (144) describing actions to be taken in response to given situations. Situations can be either customer statements, requests, or questions, or service order software output or configurations. Actions can be either responses by the CSR to customer statements or to application information, commands or data entered into the application by the CSR, or actions focused around information processing and decision making, as previously described.

The next level of hierarchy (140) is conversations (148). Conversations (148) are syntactically correct sequences through discourse grammar (144) made up of sequences of situation-action rules (146). Each abstract situation and action in a conversation sequence is instantiated with specific information in the form of application commands or information, or text with accompanying audio. Conversations (148) are grouped together to reflect different types of scenarios that could occur between a caller and a CSR. Branches within conversations (148) are based on customer information. Situation-action rules (146) that are conceptually related map onto discourse grammar (144) nodes. These nodes are reusable portions of conversations that can appear in several different conversation scenarios. Ultimately, a specification of each of these layers defines a course, such as VMS. A course has a title, list of topics, a list of grammars, a list of activities (situations or actions), a list of conversations (subsuming text, audio, and application communication) and a list of application specifications.

It is further anticipated by Bloom et al., col. 16, lines 15-30, where it recites:

Referring now to FIG. 8, an example of a subset of the discourse grammar representation is shown, denoted generally by reference numeral 160. Conversations or scenarios can be constructed by combining all of the individual nodes along any one branch (from left to right) of the discourse grammar. For example, the scenario of servicing

a customer's direct request for VMS (162) could involve some or all of the following: opening (164), legal guidelines (166), check availability (168), verify class of service (170), verify feature compatibility (172), ring options (174), due date (176), and close contact (178). The specific sub-topics employed would depend upon "customer" responses or constraints. That is, if the service is not available in the customer's area, the scenario would contain only opening (164), legal guidelines (166), check availability (168), and close contact (178).

It is further anticipated by Bloom et al., col. 17, lines 25-45, where it recites:

An application description preferably has a name, a list of screen definitions, the initial screen of the application, and a description of how to jump from screen-to-screen. An application screen describes one screen that has a name and a list of fields that make up that screen. The screen item describes an item of the screen and has a name by which it can be referred, a position and a size within the screen, and a default value. The value can be defined as a string or dynamically by a function. For example, a field showing the date or time would refer to a function, which supplies those strings. A screen label is a screen item which is not editable by the user. A screen field is a screen item which is editable by the user. An application field entry defines how items in the application should be filled out. This structure is to communicate commands when running a conversation, and to define how conversation specifics should be filled in. A screen sequence defines a sequence in which the screens are shown, and has a predicate which is applied to any conversation name to determine whether the sequence is appropriate for that conversation.

Further, inventory is anticipated by Bloom et al., col. 1, lines 20-36, where it recites:

The CSR's job is a complicated one in which they are expected to handle all manner of customer calls regarding the provider's products and services. This means that they must simultaneously carry on a consultative conversation with the caller, manipulate service order and billing software to find out information about the caller, enter information regarding service registration, rapidly look-up information about **availability, compatibility and capabilities of the different products** and services from reference documentation, understand all of the features and incompatibilities of the offered services, and at times prepare mailings of information for the customer. These services and products, as well as the information about them, are frequently updated, producing

an ongoing learning problem in order to "stay current". Because of this complexity, it may take a year or more of **training** and on-the-job experience for CSRs to become fully proficient.

Claim 81's "(d) logic that monitors progress of a student toward the goal and provides feedback that further provides the student assistance in accomplishing the goal; and" is anticipated by Bloom et al., col. 7, lines 20-30, where it recites:

Referring now to FIGS. 4 and 5, the function of exercise customer interaction skills (94) employs rehearsing conversations (116) or examining contact flow (118) as two different ways of rehearsing customer contacts. During rehearse conversation (116), tutor (112) supports trainees working through customer contacts representative of those faced on the job. As trainees work through the contacts, immediate feedback and hints (120) are available when trainees have difficulties. Moreover, at the end of each contact rehearsal, trainees are provided summary feedback (122) including assessment of their current knowledge state.

Claim 81's "(e) logic that provides information to assist with a next step in achieving the goal." is anticipated by Bloom et al., col. 7, lines 20-30, where it recites:

Referring now to FIGS. 4 and 5, the function of exercise customer interaction skills (94) employs rehearsing conversations (116) or examining contact flow (118) as two different ways of rehearsing customer contacts. During rehearse conversation (116), tutor (112) supports trainees working through customer contacts representative of those faced on the job. As trainees work through the contacts, immediate feedback and hints (120) are available when trainees have difficulties. Moreover, at the end of each contact rehearsal, trainees are provided summary feedback (122) including assessment of their current knowledge state.

It is further anticipated by Bloom et al., col. 23, lines 30-45, where it recites:

At the end of each contact rehearsal or examination, the method and system of the present invention provide for several different types of feedback, selectable by the trainee. This approach includes a view summary feedback type where trainees can view a brief, digitized video of an expert CSR summarizing the salient points and features of the previous contact. A repeat conversation feedback type allows the trainee to redo the previous contact using the same or different instruction style settings for dialog and application interactions. With a selective review feedback type, the trainee can listen to all or part of the contact just practiced, reviewing and comparing their recorded responses to an expert recorded response. Finally, with a summarized progress feedback type, the trainee can view an assessment, including any changes, of the trainee's proficiency with regard to various topics.

Claim 90

Claim 90's " The computer-readable medium of claim 1, wherein the aspect of inventory administration is selected from the group consisting of inventory management, stocking, return on revenue, markdown, and assortment strategy." is anticipated by Bloom et al., col. 1, lines 20-36, where it recites:

The CSR's job is a complicated one in which they are expected to handle all manner of customer calls regarding the provider's products and services. This means that they must simultaneously carry on a consultative conversation with the caller, manipulate service order and billing software to find out information about the caller, enter information regarding service registration, rapidly look-up information about availability, compatibility and capabilities of the different products and services from reference documentation, understand all of the features and incompatibilities of the offered services, and at times prepare mailings of information for the customer. These services and products, as well as the information about them, are frequently updated, producing an ongoing learning problem in order to "stay current". Because of this complexity, it may take a year or more of training and on-the-job experience for CSRs to become fully proficient.

Conclusion

The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. Specifically:

- A. McIlwaine et al. (U.S. Patent Number 6,301,573 B1; dated 09 OCT 2001; class 706; subclass 061) discloses a recurrent training system.
- B. Johnson et al. (U.S. Patent Number 6,067,525 A; dated 23 MAY 2000; class 705; subclass 010) discloses an integrated computerized sales force automation system.
- C. Strickland et al. (U.S. Patent Number 5,956,024 A; dated 21 SEP 1999; class 715; subclass 717) discloses a graphical user interface for customer service representatives for subscriber management systems.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Wilbert L. Starks, Jr. whose telephone number is (571) 272-3691.

Alternatively, inquiries may be directed to the following:

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WLS

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